

Release notes for ENDF/B Development n-090\_Th\_231  
evaluation



April 26, 2017

- fudge-4.0 Warnings:

1. Cross section does not match sum of linked reaction cross sections  
*crossSectionSum label 0: total (Error # 0): CS Sum.*

**WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.41%**

2. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 1 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission] [nubar]): / Form 'eval': (Error # 0): Condition num.*

**WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small**

3. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 2 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission] [nubar]): / Form 'eval': (Error # 0): Condition num.*

**WARNING: Ratio of smallest/largest eigenvalue (5.771372e-10) is too small**

4. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 3 (total): / Form 'eval': / Component 0 (Error # 0): Condition num.*

**WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small**

5. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 3 (total): / Form 'eval': / Component 1 (Error # 0): Condition num.*

**WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small**

6. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 4 (n + Th231): / Form 'eval': / Component 0 (Error # 0): Condition num.*

**WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small**

7. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 4 (n + Th231): / Form 'eval': / Component 1 (Error # 0): Condition num.*

**WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small**

8. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 8 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission]): / Form 'eval': / Component 0 (Error # 0): Condition num.*

**WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small**

9. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 8 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission]): / Form 'eval': / Component 1 (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

10. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 10 (n + (Th231-e1 -> Th231 + gamma)): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (1.413970e-09) is too small

11. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 11 (n + (Th231-e2 -> Th231 + gamma)): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (3.627308e-09) is too small

12. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 13 (n + (Th231-e4 -> Th231 + gamma)): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (2.408153e-09) is too small

13. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 14 (n + (Th231-e5 -> Th231 + gamma)): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (7.238170e-10) is too small

14. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 15 (n + (Th231-e6 -> Th231 + gamma)): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (1.606847e-09) is too small

15. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 16 (n + (Th231-e7 -> Th231 + gamma)): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (9.309573e-09) is too small

16. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 17 (n + (Th231-e8 -> Th231 + gamma)): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (6.576184e-10) is too small

17. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 19 ( $n + (Th231\_e10 \rightarrow Th231 + \gamma)$ ): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (2.836283e-09) is too small

18. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 20 ( $n + (Th231\_e11 \rightarrow Th231 + \gamma)$ ): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (6.435797e-09) is too small

19. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 21 ( $n + (Th231\_e12 \rightarrow Th231 + \gamma)$ ): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (2.959414e-09) is too small

20. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 22 ( $n + (Th231\_e13 \rightarrow Th231 + \gamma)$ ): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (5.242194e-09) is too small

21. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 23 ( $n + (Th231\_e14 \rightarrow Th231 + \gamma)$ ): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (3.505280e-09) is too small

22. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 24 ( $n + (Th231\_e15 \rightarrow Th231 + \gamma)$ ): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (3.437288e-10) is too small

23. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 25 ( $n + (Th231\_e16 \rightarrow Th231 + \gamma)$ ): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (2.662934e-09) is too small

24. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 26 ( $n + (Th231\_e17 \rightarrow Th231 + \gamma)$ ): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (5.370171e-10) is too small

25. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 27 ( $n + (Th231\_e18 \rightarrow Th231 + \gamma)$ ): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (1.343469e-09) is too small

26. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 28 ( $n + (Th231\_e19 \rightarrow Th231 + \gamma)$ ): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (2.208912e-09) is too small

27. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 29 ( $n + (Th231\_e20 \rightarrow Th231 + \gamma)$ ): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (4.935893e-09) is too small

28. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 30 ( $n + (Th231\_c \rightarrow Th231 + \gamma)$ ): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

29. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 31 ( $\gamma + Th232$ ): / Form 'eval': / Component 0 (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

30. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 31 ( $\gamma + Th232$ ): / Form 'eval': / Component 1 (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

31. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 32 ( $n + Th231$  [angular distribution]): / Form 'eval': (Error # 1): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

32. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

*Section 33 ( $n[multiplicity: 'energyDependent', emissionMode: 'prompt'] + n[emissionMode: '1 delayed'] + \gamma [total fission] [spectrum]$ ): / Form 'eval': (Error # 0): Condition num.*

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

33. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.  
*Section 34 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission] [spectrum]): / Form 'eval': (Error # 0): Condition num.*

**WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small**

34. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.  
*Section 35 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission] [spectrum]): / Form 'eval': (Error # 0): Condition num.*

**WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small**

35. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.  
*Section 36 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission] [spectrum]): / Form 'eval': (Error # 0): Condition num.*

**WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small**

- **fudge-4.0 Errors:**

1. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_a / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING: Domain doesn't match the cross section domain: (353046.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

2. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

**WARNING: Domain doesn't match the cross section domain: (353046.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

**WARNING: Domain doesn't match the cross section domain: (387374.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

**WARNING: Domain doesn't match the cross section domain: (162647.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

**... plus 45 more instances of this message**

3. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_b / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING: Domain doesn't match the cross section domain: (387374.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

4. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_c / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING: Domain doesn't match the cross section domain: (162647.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

5. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_d / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING: Domain doesn't match the cross section domain: (353046.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

6. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_e / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING: Domain doesn't match the cross section domain: (200000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

7. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_f / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING: Domain doesn't match the cross section domain: (387374.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

8. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_g / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING: Domain doesn't match the cross section domain: (353046.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

9. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_h / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

10. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_i / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

11. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_j / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING: Domain doesn't match the cross section domain: (200000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

12. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_k / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING: Domain doesn't match the cross section domain: (318466.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

13. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_l / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING: Domain doesn't match the cross section domain: (387374.0 -> 20000000.0) vs (110963.0 -> 20000000.0)**

14. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_m / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (273368.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

15. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_n / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

16. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_o / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (353046.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

17. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_p / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (300000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

18. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_q / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

19. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_r / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (318466.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

20. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_s / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

21. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_t / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

22. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_u / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (379225.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

23. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_v / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

24. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_w / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (300000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

25. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_x / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (353046.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

26. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_y / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (353046.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

27. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_z / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

28. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_aa / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (318466.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

29. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_ab / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (326332.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

30. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_ac / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

31. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_ad / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (379225.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

32. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_ae / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (379225.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

33. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_af / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (353046.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

34. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_ag / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (353046.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

35. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_ah / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

36. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_ai / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

37. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_aj / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (379225.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

38. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_ak / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

39. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_al / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (379225.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

40. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_am / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

41. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_an / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)
42. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_ao / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)
43. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_ap / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)
44. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_aq / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)
45. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_ar / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)
46. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_as / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)
47. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_at / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)
48. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_au / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)
49. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_av / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)

50. Energy range of data set does not match cross section range  
*reaction label 21: n + (Th231\_c -> Th231 + gamma) / Product: Th231\_c / Decay product: gamma\_aw / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110963.0 -> 20000000.0)
51. Calculated and tabulated Q values disagree.  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma (Error # 0): Q mismatch*
- WARNING: Calculated and tabulated Q-values disagree: -4734298.617156982 eV vs -5118020. eV!
52. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_a / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (5500000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
53. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_a / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (5500000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
54. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_b / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
55. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_b / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
56. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_c / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (5500000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
57. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (5500000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
58. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_d / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)

59. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_d / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
60. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_e / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
61. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_e / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
62. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_f / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
63. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_f / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
64. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_g / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
65. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_g / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
66. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_h / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
67. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_h / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)

68. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_i / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)

69. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_i / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)

70. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_j / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)

71. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_j / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)

72. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_k / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)

73. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_k / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)

74. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_l / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)

75. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_l / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)

76. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_m / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)

77. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_m / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
78. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_n / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
79. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_n / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
80. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_o / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
81. Energy range of data set does not match cross section range  
*reaction label 22: n[multiplicity:'2'] + Th230 + gamma / Product: gamma\_o / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5140360.0 -> 20000000.0)
82. Calculated and tabulated Q values disagree.  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma (Error # 0): Q mismatch*
- WARNING: Calculated and tabulated Q-values disagree: -11528153.00112915 eV vs -1.19119e7 eV!
83. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_a / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
84. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_a / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
85. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_b / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

86. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_b / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

87. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_c / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

88. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

89. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_d / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

90. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_d / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

91. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_e / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

92. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_e / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

93. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_f / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

94. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_f / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

95. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_g / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

96. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_g / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

97. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_h / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

98. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_h / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

99. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_i / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

100. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_i / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

101. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_j / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

102. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_j / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

103. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_k / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

104. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_k / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
105. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_l / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
106. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_l / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
107. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_m / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
108. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_m / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
109. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_n / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
110. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_n / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
111. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_o / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
112. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_o / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

113. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_p / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

114. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_p / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

115. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_q / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

116. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_q / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

117. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_r / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

118. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_r / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

119. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_s / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

120. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_s / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

121. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_t / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

122. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_t / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
123. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_u / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
124. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_u / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
125. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_v / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
126. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_v / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
127. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_w / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
128. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_w / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
129. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_x / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
130. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_x / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

131. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_y / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

132. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_y / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

133. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_z / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

134. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_z / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

135. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_aa / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

136. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_aa / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

137. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ab / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

138. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ab / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

139. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ac / Multiplicity: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

140. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ac / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
141. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ad / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
142. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ad / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
143. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ae / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
144. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ae / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
145. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_af / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
146. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_af / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
147. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ag / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
148. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ag / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

149. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ah / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
150. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ah / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
151. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ai / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
152. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ai / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
153. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_aj / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
154. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_aj / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
155. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ak / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
156. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ak / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
157. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_al / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

158. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_al / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
159. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_am / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
160. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_am / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
161. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_an / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
162. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_an / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
163. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ao / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
164. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ao / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
165. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ap / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
166. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ap / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

167. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_aq / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
168. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_aq / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
169. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ar / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
170. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ar / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
171. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_as / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
172. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_as / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
173. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_at / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
174. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_at / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
175. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_au / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

176. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_au / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
177. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_av / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
178. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_av / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
179. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_aw / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
180. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_aw / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
181. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ax / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
182. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ax / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
183. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ay / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
184. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ay / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

185. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_az / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
186. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_az / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
187. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ba / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
188. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ba / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
189. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bb / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
190. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bb / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
191. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bc / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
192. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bc / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
193. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bd / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

194. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bd / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
195. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_be / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
196. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_be / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
197. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bf / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
198. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bf / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
199. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bg / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
200. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bg / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
201. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bh / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
202. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bh / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

203. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma.bi / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
204. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma.bi / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
205. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma.bj / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
206. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma.bj / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
207. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma.bk / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
208. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma.bk / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
209. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma.bl / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
210. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma.bl / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
211. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma.bm / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

212. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bm / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
213. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bn / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
214. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bn / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
215. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bo / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
216. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bo / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
217. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bp / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
218. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bp / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
219. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bq / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
220. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bq / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

221. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_br / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
222. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_br / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
223. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bs / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
224. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bs / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
225. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bt / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
226. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bt / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
227. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bu / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
228. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bu / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
229. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bv / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

230. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bv / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
231. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bw / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
232. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bw / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
233. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bx / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
234. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bx / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
235. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_by / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
236. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_by / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
237. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bz / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)
238. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_bz / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

239. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ca / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING:** Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

240. Energy range of data set does not match cross section range  
*reaction label 23: n[multiplicity:'3'] + Th229 + gamma / Product: gamma\_ca / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

**WARNING:** Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11963900.0 -> 20000000.0)

241. Calculated and tabulated Q values disagree.  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma (Error # 0): Q mismatch*

**WARNING:** Calculated and tabulated Q-values disagree: -16785144.67193604 eV vs -1.71689e7 eV!

242. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_a / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING:** Domain doesn't match the cross section domain: (18000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

243. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_a / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

**WARNING:** Domain doesn't match the cross section domain: (18000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

244. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_b / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING:** Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

245. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_b / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

**WARNING:** Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

246. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_c / Multiplicity: (Error # 0): Domain mismatch (a)*

**WARNING:** Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

247. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

**WARNING:** Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

248. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_d / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
249. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_d / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
250. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_e / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
251. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_e / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
252. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_f / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
253. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_f / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
254. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_g / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
255. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_g / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
256. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_h / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

257. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_h / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
258. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_i / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
259. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_i / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
260. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_j / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
261. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_j / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
262. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_k / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
263. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_k / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
264. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_l / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
265. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_l / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

266. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_m / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
267. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_m / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
268. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_n / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
269. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_n / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
270. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_o / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
271. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_o / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
272. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_p / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
273. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_p / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
274. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_q / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

275. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_q / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
276. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_r / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
277. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_r / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
278. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_s / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
279. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_s / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
280. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_t / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
281. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_t / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
282. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_u / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
283. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_u / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

284. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_v / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
285. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_v / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
286. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_w / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
287. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_w / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
288. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_x / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
289. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_x / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
290. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_y / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
291. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_y / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
292. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_z / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

293. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_z / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
294. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_aa / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
295. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_aa / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
296. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ab / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
297. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ab / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
298. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ac / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
299. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ac / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
300. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ad / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
301. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ad / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

302. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ae / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
303. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ae / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
304. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_af / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
305. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_af / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
306. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ag / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
307. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ag / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
308. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ah / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
309. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ah / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
310. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ai / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

311. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ai / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
312. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_aj / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
313. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_aj / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
314. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ak / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
315. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ak / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
316. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_al / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
317. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_al / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
318. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_am / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
319. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_am / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

320. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_an / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
321. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_an / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
322. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ao / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
323. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ao / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
324. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ap / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
325. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ap / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
326. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_aq / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
327. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_aq / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
328. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ar / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

329. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ar / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
330. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_as / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
331. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_as / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
332. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_at / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
333. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_at / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
334. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_au / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
335. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_au / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
336. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_av / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
337. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_av / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

338. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_aw / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
339. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_aw / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
340. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ax / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
341. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ax / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
342. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ay / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
343. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ay / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
344. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_az / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
345. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_az / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
346. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ba / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

347. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ba / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
348. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bb / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
349. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bb / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
350. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bc / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
351. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bc / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
352. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bd / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
353. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bd / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
354. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_be / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
355. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_be / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

356. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bf / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
357. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bf / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
358. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bg / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
359. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bg / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
360. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bh / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
361. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bh / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
362. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bi / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
363. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bi / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
364. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bj / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

365. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bj / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
366. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bk / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
367. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bk / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
368. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bl / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
369. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bl / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
370. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bm / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
371. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bm / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
372. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bn / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
373. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bn / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

374. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bo / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
375. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bo / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
376. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bp / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
377. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bp / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
378. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bq / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
379. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bq / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
380. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_br / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
381. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_br / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
382. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bs / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

383. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bs / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
384. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bt / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
385. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bt / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
386. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bu / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
387. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bu / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
388. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bv / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
389. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bv / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
390. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bw / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
391. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bw / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

392. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bx / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
393. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bx / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
394. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_by / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
395. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_by / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
396. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bz / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
397. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_bz / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
398. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ca / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
399. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_ca / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)
400. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_cb / Multiplicity: (Error # 0): Domain mismatch (a)*
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

401. Energy range of data set does not match cross section range  
*reaction label 24: n[multiplicity:'4'] + Th228 + gamma / Product: gamma\_cb / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17243800.0 -> 20000000.0)

402. Calculated and tabulated Q values disagree.  
*reaction label 26: Th232 + gamma (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: 6824005.056427002 eV vs 6440290. eV!

403. Multiplicity does not match sum of linked product multiplicities!  
*multiplicitySum label 23: n + (Th231\_c -> Th231 + gamma) total gamma multiplicity (Error # 0): summedMultiplicityMismatch*

WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 25.91%

404. Multiplicity does not match sum of linked product multiplicities!  
*multiplicitySum label 24: n[multiplicity:'2'] + Th230 + gamma total gamma multiplicity (Error # 0): summedMultiplicityMismatch*

WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 99.99%

405. Multiplicity does not match sum of linked product multiplicities!  
*multiplicitySum label 25: n[multiplicity:'3'] + Th229 + gamma total gamma multiplicity (Error # 0): summedMultiplicityMismatch*

WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 100.00%

406. Multiplicity does not match sum of linked product multiplicities!  
*multiplicitySum label 26: n[multiplicity:'4'] + Th228 + gamma total gamma multiplicity (Error # 0): summedMultiplicityMismatch*

WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 99.99%

407. Calculated and tabulated Q values disagree.  
*fissionComponent label 0: /reactionSuite/fissionComponents/fissionComponent[@label='0'] (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: 216148891214.943 eV vs 1.787267e8 eV!

408. Calculated and tabulated Q values disagree.  
*fissionComponent label 1: /reactionSuite/fissionComponents/fissionComponent[@label='1'] (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: 216148891214.943 eV vs 1.787267e8 eV!

409. Calculated and tabulated Q values disagree.  
*fissionComponent label 2: /reactionSuite/fissionComponents/fissionComponent[@label='2'] (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: 216148891214.943 eV vs 1.787267e8 eV!

410. Calculated and tabulated Q values disagree.  
*fissionComponent label 3: /reactionSuite/fissionComponents/fissionComponent[@label='3']*  
*(Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: 216148891214.943 eV vs 1.787267e8 eV!

411. A covariance matrix was not positive semi-definite, so it has negative eigenvalues.  
*Section 32 (n + Th231 [angular distribution]): / Form 'eval': /LegendreLValue L=1 vs 1* (Error # 0): Bad evs

WARNING: 11 negative eigenvalues! Worst case = -5.288194e-05

- njoy2012 Warnings:

- Evaluation has no resonance parameters given  
*unresr...calculation of unresolved resonance cross sections (0): No RR*

---message from unresr---mat 9037 has no resonance parameters  
copy as is to nout

- In some evaluations, the partial fission reactions MT=19, 20, 21, and 38 are given in File 3, but no corresponding distributions are given. In these cases, it is assumed that MT=18 should be used for the fission neutron distributions.  
*heatr...prompt kerma (0): HEATR/hinit (3)*

---message from hinit---mt19 has no spectrum  
mt18 spectrum will be used.

- Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (1): HEATR/hinit (4)*

---message from hinit---mf6, mt 16 does not give recoil za= 90230  
one-particle recoil approx. used.

- Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (2): HEATR/hinit (4)*

---message from hinit---mf6, mt 17 does not give recoil za= 90229  
one-particle recoil approx. used.

- Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (3): HEATR/hinit (4)*

---message from hinit---mf6, mt 37 does not give recoil za= 90228  
one-particle recoil approx. used.

- Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (4): HEATR/hinit (4)*

---message from hinit---mf6, mt 51 does not give recoil za= 90231  
one-particle recoil approx. used.

- Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (5): HEATR/hinit (4)*

---message from hinit---mf6, mt 52 does not give recoil za= 90231  
one-particle recoil approx. used.

8. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (6): HEATR/hinit (4)*

---message from hinit---mf6, mt 53 does not give recoil za= 90231  
one-particle recoil approx. used.

9. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (7): HEATR/hinit (4)*

---message from hinit---mf6, mt 54 does not give recoil za= 90231  
one-particle recoil approx. used.

10. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (8): HEATR/hinit (4)*

---message from hinit---mf6, mt 55 does not give recoil za= 90231  
one-particle recoil approx. used.

11. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (9): HEATR/hinit (4)*

---message from hinit---mf6, mt 56 does not give recoil za= 90231  
one-particle recoil approx. used.

12. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (10): HEATR/hinit (4)*

---message from hinit---mf6, mt 57 does not give recoil za= 90231  
one-particle recoil approx. used.

13. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (11): HEATR/hinit (4)*

---message from hinit---mf6, mt 58 does not give recoil za= 90231  
one-particle recoil approx. used.

14. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (12): HEATR/hinit (4)*

---message from hinit---mf6, mt 59 does not give recoil za= 90231  
one-particle recoil approx. used.

15. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (13): HEATR/hinit (4)*

---message from hinit---mf6, mt 60 does not give recoil za= 90231  
one-particle recoil approx. used.

16. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (14): HEATR/hinit (4)*

---message from hinit---mf6, mt 61 does not give recoil za= 90231  
one-particle recoil approx. used.

17. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (15): HEATR/hinit (4)*

---message from hinit---mf6, mt 62 does not give recoil za= 90231  
one-particle recoil approx. used.

18. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (16): HEATR/hinit (4)*

---message from hinit---mf6, mt 63 does not give recoil za= 90231  
one-particle recoil approx. used.

19. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (17): HEATR/hinit (4)*

---message from hinit---mf6, mt 64 does not give recoil za= 90231  
one-particle recoil approx. used.

20. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (18): HEATR/hinit (4)*

---message from hinit---mf6, mt 65 does not give recoil za= 90231  
one-particle recoil approx. used.

21. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (19): HEATR/hinit (4)*

---message from hinit---mf6, mt 66 does not give recoil za= 90231  
one-particle recoil approx. used.

22. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (20): HEATR/hinit (4)*

---message from hinit---mf6, mt 67 does not give recoil za= 90231  
one-particle recoil approx. used.

23. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (21): HEATR/hinit (4)*

---message from hinit---mf6, mt 68 does not give recoil za= 90231  
one-particle recoil approx. used.

24. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (22): HEATR/hinit (4)*

---message from hinit---mf6, mt 69 does not give recoil za= 90231  
one-particle recoil approx. used.

25. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (23): HEATR/hinit (4)*

---message from hinit---mf6, mt 70 does not give recoil za= 90231  
one-particle recoil approx. used.

26. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (24): HEATR/hinit (4)*

---message from hinit---mf6, mt 91 does not give recoil za= 90231  
one-particle recoil approx. used.

27. Recoil is not given, so one-particle recoil approximation used.  
*heatr...prompt kerma (25): HEATR/hinit (4)*

---message from hinit---mf6, mt102 does not give recoil za= 90232  
photon momentum recoil used.

28. There is a problem with the fission energy release.  
*heatr...prompt kerma (34): HEATR/nheat (3)*

---message from nheat---changed q from 1.787267E+08 to 1.730361E+08  
for mt 18

29. Evaluation has no resonance parameters given  
*purr...probabalistic unresolved calculation (0): No RR*

---message from purr---mat 9037 has no resonance parameters  
copy as is to nout